

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,540	04/26/2001	Frank Kowalewki	1587	9344
7590 05/18/2005			EXAMINER	
Striker Striker & Stenby			DEAN, RAYMOND S	
103 East Neck I Huntington, N			ART UNIT	PAPER NUMBER
			2684	
			DATE MAILED: 05/18/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)	
09/830,540	KOWALEWKI, FRANK	
Examiner	Art Unit	
Raymond S Dean	2684	

Advisory Action Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 28 April 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) \square The period for reply expires $\underline{3}$ months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b), ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed. may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: _____. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. Note for purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: None. Claim(s) objected to: None. Claim(s) rejected: 29 - 45. Claim(s) withdrawn from consideration: None. AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11.

The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s) 13. ☐ Other: .

SUPERVISORY PATENT EXAMINER

Raymond S. Dean May 5, 2005

Continuation of 11. does NOT place the application in condition for allowance because:

Regarding Claims 29 - 30, 39 - 40, and 45

Each sector can have a directional antenna (See Column 5 lines 20 - 24). It is well established in the art that phased array antennas, which comprise a plurality of antennas, are used as base station antennas to provide directionality. The sector antennas of Antonio can therefore be phased array antennas. The modulator of Antonio can process multiple channels (See Column 10 lines 28 - 31). The fact that each sector can have a plurality of antennas and a modulator that can process multiple channels means that a single modulator can supply a plurality of antennas and a plurality of radio channels with coded and pre-equalized signals to one mobile station.

Regarding Claims 31 - 32, 35, and 42

Antonio, as set forth above teaches the limitation disclosed in step d). Karlsson teaches a second radio station with a plurality of antennas (Column 5 lines 66 - 67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plurality of antennas taught in Karlsson on the mobile station of Antonio for the purpose of suppressing the interference associated with signals transmitted from other base stations.

Regarding Claims 33 - 34, 36 - 38, and 43 - 44

Claim 37

Please see the the rejection of Claim 37 in the office action dated January 26, 2005. It is well known in the art that mobile station antennas are bidirectional and that weighting is used in both the transmit direction and the receive direction thus there will be transmission of weighted signals.

Claim 38

Please see the rejection of Claim 38 in the office action dated January 26, 2005. Zhuang teaches the use of a DFE in combination with a channel estimator and channel precoder to transmit a pre-equalized signal on the forward link (See Figure 1). Zhuang therefore teaches transmitting pre-equalized signals.

Regarding Claim 41

Please see the rejection of Claim 41 in the office action dated January 26, 2005. The DFE of Zhaung needs a training sequence or reference signal in order to generate the tap coefficients thus there will be a transmission of said reference signal.